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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,673	03/10/2004	Ashish M. Sukhadia	C51757 0520	4144

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EXAMINER

LEE, RIP A

ART UNIT PAPER NUMBER

1713

DATE MAILED: 03/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/797,673

Applicant(s)

SUKHADIA ET AL.

Examiner

Rip A. Lee

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on January 6, 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 17-33, 35-43 and 45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17-33, 35-43 and 45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01-06-06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action follows a response filed on January 6, 2006. Applicants have amended claims 1, 10, 11, 15, 19, 20, 28-29, 33, 37-39, and 43. Claims 16, 34, and 44 were canceled. Claims 1-15, 17-33, 35-43, and 45 are pending.

Claim Rejections - 35 USC § 102 / 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-15, 17-33, 35-43, and 45 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over McDaniel *et al.* (U.S. 6,833,338) for the same reasons set forth in the previous office action.
3. Claims 1-15, 17-33, 35-43, and 45 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over McDaniel *et al.* (U.S. 6,613,852) for the same reasons set forth in the previous office action.

Response to Arguments

4. The provisional obviousness-type double patenting rejection of claims 38-45 has been withdrawn in light of claim amendments.
5. Applicant's arguments with respect to claim rejections under 35 U.S.C. 112, 2nd paragraph have been considered fully, and they are persuasive. Consequently, the rejection of those claims has been withdrawn.

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6. Applicants traverse the rejection of claims under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over McDaniel *et al.* (U.S. 6,833,338) and. Applicant's have been considered fully, but they are not persuasive.

Applicants submit that the prior art does not teach the claimed process because of the prior art teaching of use of titanium treated solid oxide, *i.e.*, fluorided, titanium-containing silica alumina. One notes in the claims that the chemically treated solid oxide *comprises* a particular solid oxide material. It is well-established that use of the term "comprises" does not exclude unrecited elements. As such, the support material disclosed in the prior art adequately meets the subject matter of the instant claims.

Applicants note that components of a catalyst system give rise to substantially different polymer properties, such as density, melt index, HLMI, polydispersity index, as well as film properties. While there is merit in this statement, one of ordinary skill in the art may turn to McDaniel *et al.* and observe that polymers of the invention have properties that are well within range of those described in the instant claims: (i) $M_w/M_n = 2.5-20$, (ii) $d = 0.90-0.97 \text{ g/cm}^3$, (iii) $MI = 0.01-100 \text{ g/10 min}$, (iv) $HLMI/MI = 10-250$.

The examiner also notes that properties such as M_w/M_n , d , MI, and HLMI/MI are attributed to the actual olefin polymerization process, whereas film properties such as clarity and haze, are also a consequence of processing procedures – nucleation, stretching, *etc.* Clearly, the instant claims are merely drawn to a process of polymerizing olefins and not the processing steps required to achieve the desired film and film characteristics. Coupled with the fact that the process taught in McDaniel *et al.* is essentially the same as that described in the instant claims and in view of the fact that the polymers also exhibit the claimed properties, Applicants bear the burden of proof to establish any unobviousness differences over the teachings of the prior art. To date, Applicants have not met this burden of proof.

In view of this and previous discussion, the rejection has not been withdrawn.

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7. The rejection of claims over McDaniel *et al.* (U.S. 6,376,415) has been overcome by amendment. The reference does not disclose all features of the claimed process. There is teaching of use of fluorided, tungsten-containing alumina in conjunction with an unbridged metallocene as a comparative example. While the patent discloses a series of bridged metallocenes which may be used in the invention, one of ordinary skill in the art would not be motivated to use these with the support shown in the comparative example.

Applicants traverse the rejection of claims under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over McDaniel *et al.* (U.S. 6,613,852). Applicant's have been considered fully, but they are not persuasive. Applicants arguments hinge on the notion that there is no suggestion in the prior art to select a bridged metallocene over a non-bridged metallocene, indicating that ten out of nineteen structures of compounds in the patent are actually bridged. There are thirteen out of twenty-three compounds that would qualify as "tightly bridged metallocene," under the general definition provided by Applicants, and the comprehensiveness of the listing does not negate the fact that any of these thirteen compounds used in the process taught by McDaniel *et al.* meets the process claims set forth in the application. The examiner notes that claimed compounds $\text{EtInd}_2\text{ZrCl}_2$ and $\text{Me}_2\text{Si}(\text{Ind})_2\text{ZrCl}_2$ are clearly disclosed by the prior art in columns 5 and 6. Furthermore, Applicants have not met their burden of proof of establishing any unobviousness differences over the teachings of the prior art, as indicated in the previous office action.

In view of this and previous discussion, the rejection has not been withdrawn.

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Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

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March 10, 2006



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